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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,868	11/26/2003	Alfred Paul Metheny	N1087	8645

7590 01/11/2005
Norman Friedland
Suite 400
11300 US Highway One
North Palm Beach, FL 33408

EXAMINER

NGUYEN, NINH H

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/722,868	Applicant(s) METHENY, ALFRED PAUL	
	Examiner Ninh H. Nguyen	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite for lack of antecedent basis for the limitation "the porous metal" on lines 2 and 3 of the claims.

Claim 8 is indefinite for lack of antecedent basis for the limitation "the main body" on lines 3-4 of the claims.

Note: it is assumed that "the main body" is the main body of the vane in the rejection below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, as far as they are definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Roesler et al. (6,412,541).

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Roesler discloses an outer air seal for a turbine rotor including a main annular body surrounding the tips of the blades of the turbine rotor (Figs. 5, 6A, 6B), the main body comprising a substrate 9 made from a porous metal and a coating of a thermal barrier coating 11 on the exterior of the substrate and adjacent to the tips of the blades, the main body including a hook-like member (Fig. 5), an engine casing, the hook-like member fitted into a groove formed in the engine casing (not shown) for supporting the outer air seal in proximity to the tips of the turbine blades;

wherein the air seal further including means 18 (Fig. 6B) for supplying cooling air to openings formed in the porous material, whereby the cooling air flows through the pores of the porous material; and

wherein spent cooling air from the porous material flows through openings 8 formed in the thermal barrier coating to cool the exterior surface of the thermal barrier coating.

3. Claims 1-3, and 7-9, as far as they are definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Hagle et al. (5,236,151).

Hagle discloses a gas turbine engine stator vane assembly comprising a plurality of circumferentially spaced vanes 40 (Fig. 3; col. 4, lines 48-53), the vanes made from a porous metal material 22 (col. 3, lines 26-28) and having a coating 38 adjacent to the outer surface thereof; the coating being made from a thermal barrier coating or ceramic, and an outer platform (not shown), the vane being mounted to the outer platform;

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wherein the gas turbine further including means for supplying cooling air to openings formed in the porous material (col. 6, lines 7-15), whereby the cooling air flows through the pores of the porous material for inherently cooling the main body of the vane; and

wherein spent cooling air from the porous material flows through openings formed in the thermal barrier coating or ceramic coating to cool the exterior surface of the thermal barrier coating or ceramic coating (col. 6, lines 7-15).

Prior Art

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 1 patent.

Grylls et al. (6,648,596) is cited to show a turbine vane comprising a porous material and a coating on the surface thereof.

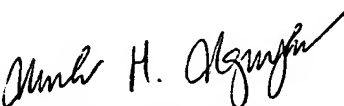
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, please go to <http://pair-direct.uspto.gov> or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).


NINH H. NGUYEN
PRIMARY EXAMINER

Nhn
January 7, 2005